



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

70813 7590 07/28/2010

GOODWIN PROCTER LLP  
901 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20001

EXAMINER

NGUYEN, MINH DIEU T

ART UNIT

PAPER NUMBER

2438

DATE MAILED: 07/28/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

08/470,051

06/06/1995

JOHN C. HARVEY

5634.268

7002

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHODS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/28/2010

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

70813 7590 07/28/2010

**GOODWIN PROCTER LLP  
901 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20001**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/470,051	06/06/1995	JOHN C. HARVEY	5634.268	7002

TITLE OF INVENTION: SIGNAL PROCESSING APPARATUS AND METHODS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/28/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, MINH DIEU T	2438	725-038000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/470,051	06/06/1995	JOHN C. HARVEY	5634.268	7002
70813	7590	07/28/2010	EXAMINER	
GOODWIN PROCTER LLP 901 NEW YORK AVENUE, N.W. WASHINGTON, DC 20001			NGUYEN, MINH DIEU T	
			ART UNIT	PAPER NUMBER
			2438	
DATE MAILED: 07/28/2010				

## Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b) (application filed prior to June 8, 1995)

This patent application was filed prior to June 8, 1995, thus no Patent Term Extension or Adjustment applies.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	08/470,051	HARVEY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MINH DIEU NGUYEN	2438	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/9/2000.
2. ☒ The allowed claim(s) is/are 67,77,78,205-208 and 315-318.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| <p>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date <u>1/16/96; 5/5/2003</u></p> <p>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</p> | <p>5. <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date ____.</p> <p>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</p> <p>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</p> <p>9. <input type="checkbox"/> Other ____.</p> |
|--|--|

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Carl L. Benson on 4/20/2010.

2. The application has been amended as follows:

**1-66. (Cancelled)**

**67. (Currently amended)** A method for controlling ~~the~~ display of video information on a remote display from a cable head end by downloading an executable program from a source over a cable network to a remote control processor, said remote control processor having a storage device, said method comprising the steps of:

receiving said downloaded executable program over said cable network at said remote control processor;

storing said downloaded executable program at said remote control processor in said storage device; and

receiving control signals at said remote control processor from said cable head end; and

Art Unit: 2438

applying said received control signals to said downloaded executable program in said storage device, said applied control signals causing ~~executing~~ said downloaded executable program at said remote control processor, said ~~downloaded executable program receiving messages from said cable head end to effect operation~~ to be executed in accordance with instructions within said applied control signals, wherein the execution of said downloaded executable program, wherein said method controls displaying under said instructions of said applied control signals controls the manner by which said video information is displayed on said remote display.

**68-76. (Cancelled)**

**77. (Previously presented)** The method of claim 67, wherein at least one of said messages from said cable head end to said downloaded executable program comprises a command.

**78. (Previously presented)** The method of claim 67, wherein at least one of said messages from said cable head end to said downloaded executable program comprises an instruct-to-overlay signal.

**79-169. (Cancelled)**

Art Unit: 2438

**170. (Cancelled)** ~~A method of controlling a receiver station which includes a television receiver, a signal detector, a processor, an output device, and with said receiver station adapted to detect the presence of one or more control signals and programmed to process downloadable executable code, said method of controlling comprising the steps of:~~

~~(1) receiving at a transmitter station downloadable executable code which is effective at said receiver station to respond to messages communicated from a broadcast or cablecast transmitter station to affect said output device, said downloadable executable code having at said receiver station a target processor to process data;~~

~~(2) transferring said downloadable executable code to a transmitter;~~

~~(3) receiving said one or more control signals at said transmitter station, said one or more control signals operate to execute said downloadable executable code;~~

~~(4) transferring said one or more control signals to said transmitter; and~~

~~(5) transmitting at least one information transmission including said downloadable executable code and said one or more control signals to said receiver station, said information transmission effective to control said receiver station.~~

**171. (Cancelled)** ~~The method of claim 170, wherein said downloadable executable code or identification data in respect of said downloadable executable code are embedded in a television signal.~~

**172. (Cancelled)** ~~The method of claim 170, wherein video is displayed at said receiver station and said downloadable executable code programs said receiver station processor to output a first portion of said video.~~

**173. (Cancelled)** ~~The method of claim 170, further comprising the step of transmitting a second portion of said video to said receiver station.~~

**176. (Cancelled)** ~~The method of claim 170, further comprising the step of transmitting a message of said messages.~~

**205. (Currently amended)** A method of controlling a plurality of receiver stations ~~each of which includes a television receiver, a signal detector, a processor, and with each said receiver station adapted to detect the presence of one or more control signals and programmed to process a~~ downloadable processor instructions executable program, said method comprising the steps of:

(1) receiving at a transmitter station said downloadable ~~processor instructions~~ executable program which are is effective at a receiver station, when stored and executed, to operate a computer under broadcast or cablecast network control, said downloadable ~~processor instructions having~~ executable program controlling at each of said plurality of receiver stations a target processor to ~~process data~~ to control the display of video;

(2) transferring said downloadable processor instruction to a transmitter;



Art Unit: 2438

(3) receiving said ~~one or more~~ control signals at said transmitter station, wherein ~~each of~~ said ~~one or more~~ control signals operate when applied to said downloadable executable program stored at said plurality of receiver stations to execute a different one of said downloadable processor instructions cause said downloadable executable program to be executed in accordance with instructions within said applied control signals; and

(4) transferring said ~~one or more~~ control signals to said transmitter, and transmitting an information transmission comprising said downloadable processor instructions and said ~~one or more~~ control signals;

~~wherein said method controls said plurality of receiver stations to said plurality of receiver stations.~~

**206. (Currently amended)** The method of claim 205, wherein said downloadable ~~processor instructions~~ executable program and said ~~one or more~~ control signals are embedded in a television signal.

**207. (Currently amended)** The method of claim 205, wherein said video is displayed at a receiver station and said downloadable ~~processor instructions~~ program executable program programs said target processor of said receiver station to output a first portion of said video, said method further comprising the step of transmitting a second portion of said video to said receiver station.

Art Unit: 2438

**208. (Currently amended)** The method of claim 205, wherein a period of time separates transmission of a first and a second of at least two of said ~~one or more~~ control signals.

**209-314. (Cancelled)**

**315. (Currently amended)** A method of controlling a plurality of receiver stations each of which includes a television receiver, a signal detector, a processor to process data, each said plurality of receiver stations is adapted to detect at least one control signal and programmed to process downloadable processor instructions, said method comprising the steps of:

(1) receiving at a transmitter station downloadable processor instructions which are effective when stored at a receiver station of said plurality of receiver stations to ~~implement a scheme for at least one of generating and transmitting~~ control generation of content of a television signal program;

(2) transferring said downloadable processor instructions to a transmitter;

(3) receiving said at least one control signal at said transmitter station, wherein said at least one control signal operates when applied to said downloadable processor instructions stored at said receiver station of said plurality of receiver stations to ~~execute~~ cause said downloadable processor instructions to be executed in accordance with instructions within said applied at least one control signal; and

(4) transferring said at least one control signal to said transmitter, and transmitting at least one information transmission comprising said downloadable

Art Unit: 2438

processor instructions and said at least one control signal to said receiver station of said plurality of receiver stations.

**316. (Currently amended)** The method of claim 315, further comprising the steps of:

embedding at least one of (i) said downloadable processor instructions and (ii) identification data with respect to said downloadable processor instructions in a signal that includes a portion of said television program; and transmitting said signal that includes a portion of said television program.

**317. (Currently amended)** The method of claim 315, wherein a said television program is displayed at a said receiver station of said plurality of receiver stations and said downloadable processor instructions program said processor at said receiver station of said plurality of receiver stations to output a video portion of said television program.

**318. (Previously presented)** The method of claim 317, further comprising the step of transmitting said television program.

***Allowable Subject Matter***

3. Claims 67, 77-78, 205-208 and 315-318 are allowed. These claims are renumbered as 1-11.

4. The following is an examiner's statement of reasons for allowance: The independent claims identifies unique features of "applying said received control

Art Unit: 2438

signals to said downloaded executable program in said storage device, said applied control signals causing said downloaded executable program at said remote control processor to be executed in accordance with instructions within said applied control signals, wherein the execution of said downloaded executable program under said instructions of said applied control signals controls the manner by which said video information is displayed on said remote display". The prior arts of record fail to anticipate or render the above limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Administrative Requirement***

5. A double patenting administrative requirement is not being required by the examiner in the instant application since the examiner has independently conducted a double patenting analysis of the claims in the instant application.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

Art Unit: 2438

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi T. Arani can be reached on 571-272-3787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Minh Dieu Nguyen/  
Primary Examiner, Art Unit 2438